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### **REMARKS/ARGUMENTS**

The Applicant acknowledges, with thanks, receipt of the Office Action mailed March 23, 2004. Claims 1-5, 10-18 and 43 are pending. Claims 1-5 and 10-18 stand rejected, claim 43 is new.

#### **Rejection of claims under 35 U.S.C. § 103**

Claims 1-22 and 42 were rejected under 35 USC § 103 as being obvious over the combination of US Patent No. 5,768,530 to Sandorfi (hereinafter "Sandorfi") and US Patent No. 6,408,376 to Ganapathy (hereinafter "Ganapathy"). Claims 19-27 and 42 have been canceled without prejudice or disclaimer. For the reasons that will set forth below, claims 1-18 and 43 are patentable over the combination of Sandorfi and Ganapathy.

Independent claims 1, 10 and 15 recite that the first (*e.g.*, MAC) processor determines whether or not to split the frame header and data when transferring the frame to the second processor. While the frame is in the first memory, the first processor (*e.g.*, MAC) will examine the frame and split frames when there is benefit to splitting the header and data. This approach and the benefits of it were summarized in the specification on page 12 line 22 through page 13, line 14:

It should be understood that the direct data stream from MIDI FIFO 20 to HOST FIFO 40 should be carefully controlled, and may be useful only on certain frames; since MAC processor intervention is needed in many cases. On most frames it is not useful since MAC processor 30 must react and process the data on a timely basis. This is required since it is not possible to deterministically predict the contents of forthcoming frames. However, in cases where data arrives in a streaming fashion (*e.g.*, Video or Audio data) this second embodiment can be used as an optimization. This is the case in applications such as wireless bridging devices, where a direct data transfer occurs repetitively and is more predictable. Thus, it may be preferable to utilize the second embodiment (for streaming type data frames) of the present invention in combination with the first embodiment (for other data frames and control frames) of the present invention.

One approach is to process a "lead frame" indicating to MAC processor 30 how many streamed data frames will be arriving next. At that point, MAC processor 30 knows to enable the "direct data mode" of the second embodiment, since there is a priori knowledge and predictability in the forthcoming data stream. The added advantage of this approach is not only speed and reduced memory traffic, but lower latency; since HOST processor 60 can react to the incoming data as soon as possible. This provides improved quality of service for fast PHY data

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to HOST data requirements found in wireless voice and video image applications where low latency is important.

By contrast, Sandorfi automatically splits the frame header and the frame data into different FIFO buffers. The Sandorfi data path always separates the frame header and data and never uses the processor to determine which frames benefit from splitting. Sandorfi teaches "to provide an architecture for an interfacing circuit that eliminates any need for a processor to control interface operations" which is in contrast to the new claims that teach to use the processor to determine which frames split the header portion and the data portions.

Furthermore, referring to Fig. 4, Sandorfi uses a "frame processing circuit 10 that receives the incoming information frame and divides each frame into a header portion for transfer into a received header FIFO (first in, first out) buffer 51 and a data portion for transfer into a received data FIFO buffer 52" (col. 5, lines 63-67). However, claims 1, 6 and 10 further recite that under certain circumstances the data portion and header portion are transferred together to a first memory of the second (host) processor responsive to the data packet not being a streaming packet.

The aforementioned deficiencies in Sandorfi are not remedied by any teaching of Ganapathy. The examiner relies on Ganapathy to teach formatting the data portion and transferring the data by executing a single processor instruction, neither of which remedy the aforementioned deficiencies of Sandorfi.

Claims 2-5 and 43 depend directly from claim 1 and therefore contains each and every element of claim 1. Claims 11-14 depend directly from claim 10 and therefore contains each and every element of claim 10. Claims 16-18 depend directly from claim 15 and therefore contains each and every element of claim 15. Therefore, for the reasons already set forth for claims 1, 10 and 15, claims 2-5, 11-14, 16-18 and 43 are patentable over the cited prior art.

In addition to the reasons already set forth for claim 1, new claim 43 recites determining from the data packet a number of subsequent data packets belonging to the stream, the subsequent data packets having a header portion and a data portion, and automatically transferring the header portion of the subsequent data packets to the first memory of the second processing system and the data portion of the subsequent data packets to the second memory of

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the second processing system from the first memory device. By contrast, Sandorfi always divides the header and data portions of packets and stores them into separate FIFO buffers. Thus Sandorfi does not determine a number of subsequent packets belonging to a data stream and automatically transferring the header portion and data portion to first and second memories respectively of a second processor. The aforementioned deficiency is not remedied by any teaching of Ganapathy. Thus, neither Sandorfi nor Ganapathy, alone or in combination, teach, suggest or motivate the elements of claim 43.

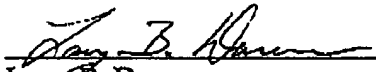
In view of the foregoing, it is respectfully submitted that the present application is now in proper condition for allowance. If the Examiner believes there are any further matters which need to be discussed in order to expedite the prosecution of the present application, the Examiner is invited to contact the undersigned.

If there are any fees necessitated by the foregoing communication, please charge such fees to our Deposit Account No. 50-0902, referencing our Docket No. (72255/02661).

Respectfully submitted,

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